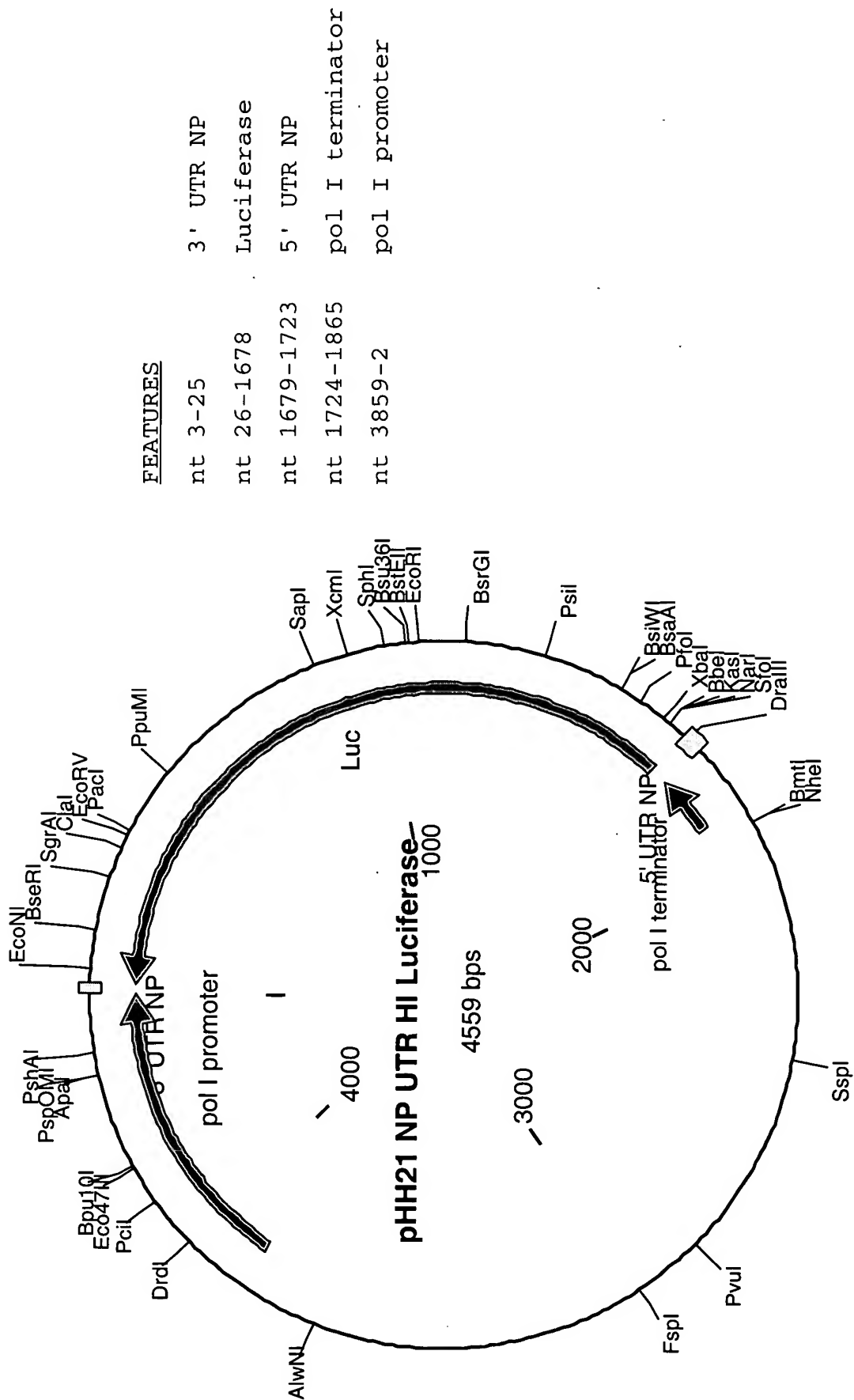




MAP OF PLASMID pHH21 NP UTR luciferase



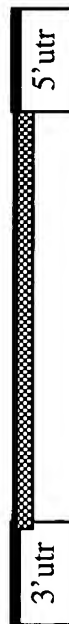
TRANSCRIPTION, REPLICATION AND TRANSLATION OF A SEGMENTED NEGATIVE STRAND VIRUS ARTIFICIAL SEGMENT



pHH21 NP UTR HI Luciferase

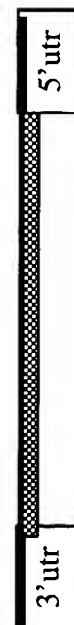


Transfect cells
with plasmid



Host cell RNA polymerase I enzyme transcribes a
negative polarity RNA molecule

Infect with virus-
containing sample or
introduce viral
polymerase components

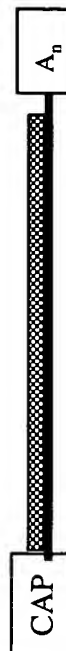


Viral polymerase replicates the +
polarity RNA into - polarity RNA

replication

Reporter protein

OR

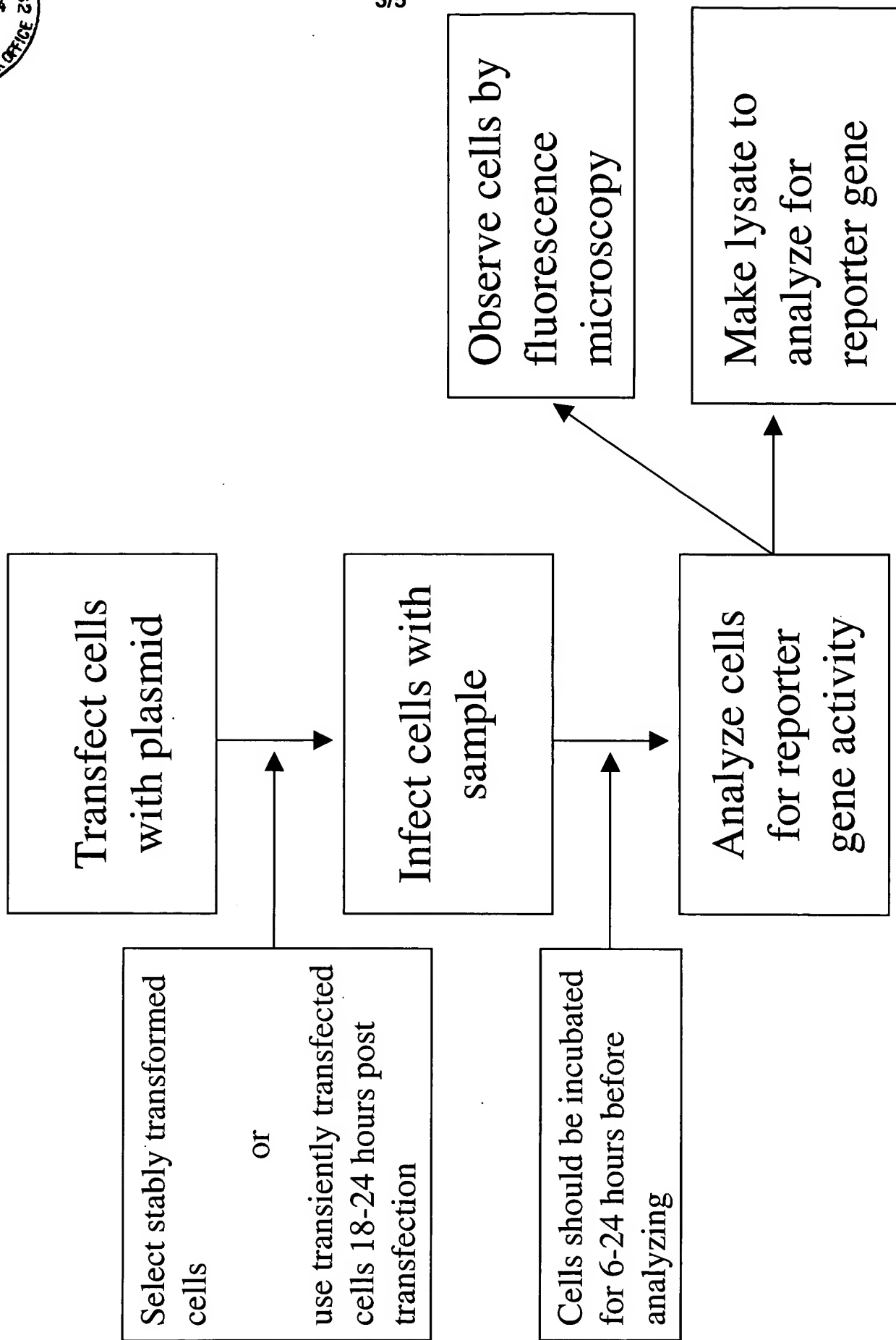


Viral polymerase recognizes the
reporter gene containing RNA,
replicates it into a positive polarity
RNA molecule and transcribes it into
an mRNA

translation

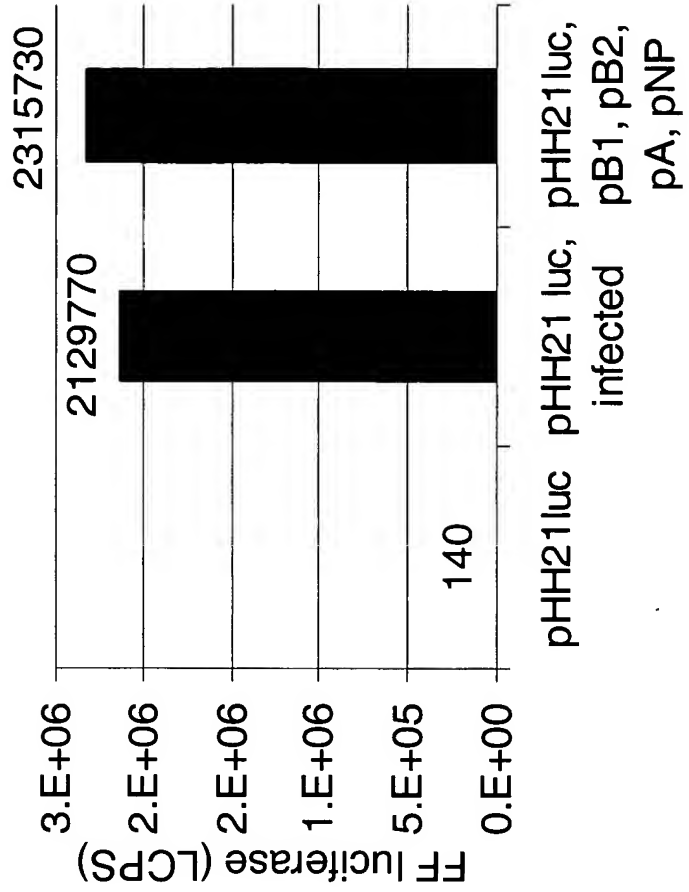


METHOD FOR DETECTING VIRUSES USING VIRAL POLYMERASE RESPONSIVE REPORTER GENES





Luciferase reporter gene assay





GFP reporter gene assay

